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## CLAIMS

 A magnetic recording/reproducing apparatus, in which a single reel cartridge having stored a magnetic tape is freely attached and detached, comprising:

a take-up reel for winding up a magnetic tape drawn from a cartridge;

arotating drum type magnetic head for performing recording and reproduction on the magnetic tape;

a transporting/connecting mechanism for transporting and connecting a leading edge of the magnetic tape to the take-up reel when the cartridge is mounted; and

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a plurality of guide posts disposed at predetermined unloading positions when the magnetic tape is not connected to the take-up reel and, after the leading edge of the magnetic tape is connected to the take-up reel, moved to predetermined loading positions to guide the magnetic tape to be wound around the rotating drum type magnetic head along predetermined moving paths, wherein

the take-up reel has a hub formed with a notch corresponding to the moving path of at least one of the guide posts passing between the rotating drum type magnetic head and the take-up reel.

- 2. The magnetic recording/reproducing apparatus according to claim 1, wherein when the magnetic tape is wound around the take-up reel for a predetermined diameter or larger, the guide posts are prohibited from moving to the unloading positions and are permitted to move only to half loading positions where the guide posts do not interfere with the magnetic tape wound around the take-up reel.
- 3. The magnetic recording/reproducing apparatus according to claim 1 or 2, wherein when the magnetic tape is wound around the take-up reel for a predetermined diameter

or larger, the magnetic tape is completely wound up into the cartridge and then the guide posts are moved to the unloading positions when an instruction to eject the cartridge is issued.

4. A magnetic recording/reproducing apparatus, in which a single reel cartridge having stored a magnetic tape is freely attached and detached, comprising:

a take-up reel for winding up the magnetic tape drawn from a cartridge;

a rotating drum type magnetic head for performing recording and reproduction on the magnetic tape;

a transporting/connecting mechanism for transporting and connecting a leading edge of the magnetic tape to the take-up reel when the cartridge is mounted; and

a plurality of guide posts for guiding the magnetic tape such that the magnetic tape is wound around the rotating drum type magnetic head, wherein

the take-up reel and the cartridge overlap each other as seen in a plan view perpendicular to a thickness direction of the cartridge, and are positioned at vertically different levels.

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